On-time takeoff 06:57 LT (09:57 UT) Landing LT (19:24:58 UT)

- Had hoped to depart 20 min early, but flight plan approval held us up.
- 200 ppb ozone at FL300 after takeoff. FL330 exit stratosphere; mixed biomass burning signals at tropopause.
- First profile has interesting chemical structure near mixed layer. Just above, CO2 is very low (397 ppm) and a number of anthropogenic gases observed.
- For logistical reasons, we pulled second and third profiles south of the FIR boundary (worry about ATC flexibility in Atlantica FIR). Both profiles are quite clean (at least compared with the first). Several saw a whale (?) on the third low leg. Need to review camera data.
- 4th profile was difficult for the crew to negotiate with ATC. We finally got approval and descended to 500' at  $\sim 25.5$  south.
- $5^{th}$  profile at  $\sim 18$  south.
- Lots of biomass burning tracers / but essentially no aerosol at 16S aloft.
- Very large gradients in biomass burning tracers around Ascension. Paused descent at 10kft for WAS / TOGA / SAGA to grab a sample of the African Biomass.

## **Debrief**

CAFS - good.

NOy – good.

DLH good.

Picarro good.

QCLS good.

SAGA good.

Panther/UCATs good.

AO2/Medusa. good.

GT-CIMS good.

NOAA CIMS good.

WAS good.

MMS good.

TOGA good.

AMP/AGA good.

CAPS good.

PALMS. good.

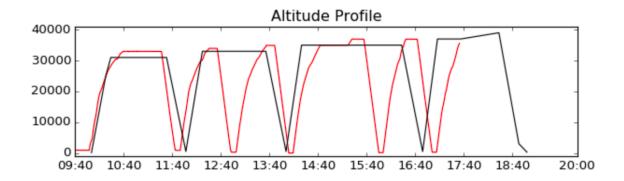
ATHOS. good.

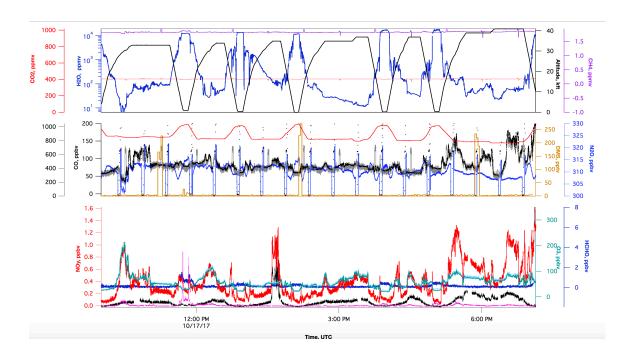
ISAF. good

SP2 – small issues – lost a bit of data beginning, second bottom. good.

HRAMS good.

CITCIMS good.





We obtained 5 profiles. All instruments report working well - phew! Lots of biomass burning influence in the north.